A.O. Smith | Commercial Gas Water Heater

CONSERVATIONIST® TANK-TYPE WATER HEATERS

BT-65, 80 & 100

FEATURES

All models comply with ASHRAE/IES 90.1-2004.

GLASS-LINED TANK — Assures years of rust-free clean hot water.

FULLY AUTOMATIC CONTROLS WITH SAFETY SHUTOFF — Accurate, dependable control system requires no electric connections. Fixed automatic gas shutoff device for added safety. Not recommended for 180°F sanitizing.

HEAVY GAUGE STEEL JACKET — Finished with baked enamel over bonderized undercoat.

FOAM INSULATION — Saves fuel, helps reduce standby heat loss.

CERTIFICATION — BT-65 units are design certified by CSA (Canadian Gas Association for units built in Canada). Certified for installation on combustible flooring.

LOW NOx — All models meet or exceed current Texas and California SCAQMD Air Quality Standards.

EASY TO INSTALL — Completely factory assembled. Only gas, water and vent connections need be made. All connections are located in front and top of heaters for ease of installation and service.

DRAFT DIVERTER — Low profile diverter furnished as standard equipment.

MAXIMUM WORKING PRESSURE — 150 psi.

MAXIMUM GAS INLET PRESSURE — 14" W.C.

HANDHOLE CLEANOUT — On models BT-80 & BT-100. Allows easy tank cleaning.

THREE YEAR LIMITED WARRANTY — For complete warranty information, consult written warranty or contact A.O. Smith

OTHER FEATURES

• Built-in gas filter and integral dirt leg (propane only) • Anodic protection • Equipped with gas pressure regulator • Integral automatic gas shutoff system prevents excessive water temperature • Factory installed A.G.A./ASME rated temperature and pressure relief valve.

BT-65 BT-80 AND 100

RECOVERY CAPACITIES

Models	Approx. Cap. Gal's.	Approx. Cap. Litres	Input Rating Btu/Hr.	Input Rating KW/Hr.	Type of Gas	TEMPERATURE RISE 30°F/ 17°C	40°F/ 22°C	50°F/ 28°C	60°F/ 33°C	70°F/ 39°C	80°F/ 45°C	90°F/ 50°C	100°F/ 56°C	110°F/ 61°C	120°F/ 67°C	130°F/ 72°C	140°F/ 78°C
BT-65	65	246	65,000	19.0	GPH	200	150	120	100	86	75	67	60	54	50	46	43
			55,000	18	LPH	758	569	455	379	326	284	254	227	205	190	174	163
BT-80	74	280	75,100	22	GPH	243	182	146	121	104	91	81	73	66	61	56	52
					LPH	916	686	550	456	392	343	305	275	249	230	211	196
BT-100	100	379	75,100	22	GPH	243	182	146	121	104	91	81	73	66	61	56	52
					LPH	916	686	550	456	392	343	305	275	249	230	211	196

Capacity ratings are actual heater performance at 80% thermal efficiency.

NOTE: To compensate for the effects of high altitude areas above 2,000 feet, recovery capacity should be reduced approximately 4% for every 1,000 feet above sea level.

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AOSCG10600

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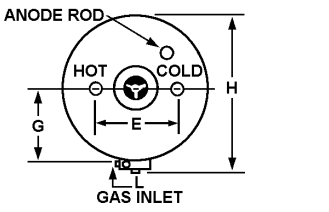
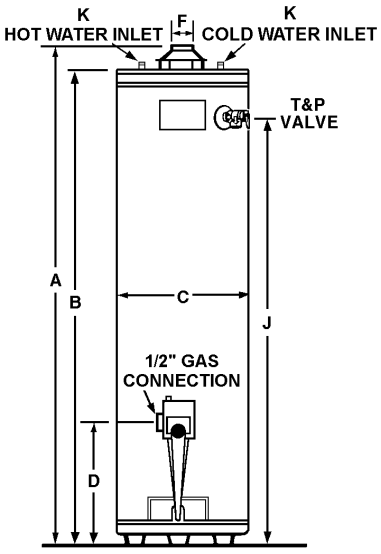
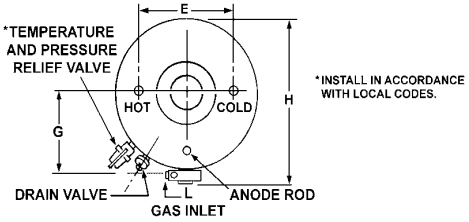


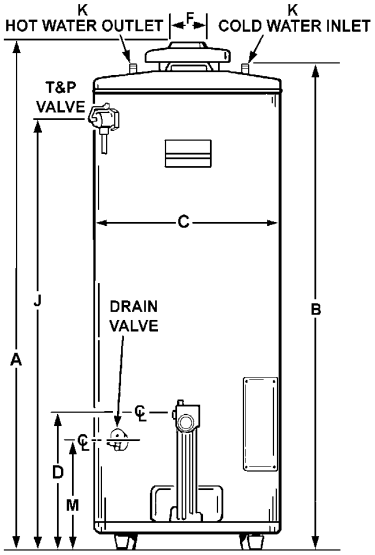
TOP VIEW



BT-65 FRONT VIEW



TOP VIEW



BT-80 & 100 FRONT VIEW

DIMENSIONS IN INCHES (MILLIMETERS)

Model No.	A	B	C	D	E	F	G	H	J	K	L	M	Approx. Ship. Wt. (Lbs.)
BT-65	65 1,651	59 1/2 1,511	24 610	15 1/2 394	8 203	4 102	11 1/2 292	25 1/2 648	54 1/4 1,378	3/4 19.05	1/2 12.7	--- ---	215 97.5 kg
BT-80	61 1/8 1,553	58 1/2 1,486	26 1/2 673	15 3/16 386	16 406	4 102	14 1/2 368	28 1/2 724	50 5/8 1,286	1 25.4	1/2 12.7	11 15/16 303	271 123 kg
BT-100	68 5/8 1,743	66 1/2 1,689	27 3/4 705	15 3/16 386	16 402	4 102	14 1/2 368	29 11/16 75.4	57 3/8 1,457	1 1/4 31.75	1/2 12.7	11 15/16 303	350 158.8 kg

SUGGESTED SPECIFICATION

Water heater(s) shall be Model _____ as manufactured by A. O. Smith or an approved equal. Water heater(s) shall be of glass-lined design, and gas-fired, equipped to burn _____ gas and design certified by the American Gas Association, (Canadian Gas Association) and shall be approved by the National Sanitation Foundation (with optional leg kit). Heaters must meet all applicable energy codes. Heaters shall have an input rating of _____ BTU/H and a recovery capacity of _____ GPH at a temperature rise of 100°F with a storage capacity of _____ gallons. Heater shall be equipped with a 2-3/4" x 3-3/4" boiler-type handhole cleanout (except BT-65) and shall have a working pressure of 150 psi. Heater(s) shall be provided with an automatic gas shutoff device and safety shutoff in event pilot flame is extinguished; a gas pressure regulator set for the type of gas supplied; an approved draft diverter, and extruded anode rod rigidly supported for cathodic protection.

An A.G.A./ASME rated pressure and temperature relief valve shall be furnished and installed by manufacturer.

The tank shall be foam insulated. The outer jacket shall have a baked enamel finish over a bonderized undercoating. Fully illustrated instruction manual and parts list to be included.

All internal surfaces of the heater(s) exposed to water shall be glass-lined with an alkaline borosilicate composition that has been fused-to-steel by firing at a temperature range of 1400° to 1600°F. Heater tank shall have a three year limited warranty against corrosion and tank failure due to sediment build-up as outlined in the written warranty. Heater(s) shall be design certified by A.G.A

Operation of the heater in a closed system where thermal expansion has not been compensated for with a properly sized expansion tank will void the warranty.

For Technical Information and Automated Fax Service, call 800-527-1953. A.O. Smith Corporation reserves the right to make product changes or improvements without prior notice.